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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,992	11/04/2003	Scott Hetherton	MP1705-US4	6652

7590 08/30/2005

Tyco Electronics Corporation  
Intellectual Property Law Dept.  
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EXAMINER

PHAN, THIEM D

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/701,992

Applicant(s)

HETHERTON ET AL.

Examiner

Tim Phan

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,8-10 and 12-26 is/are pending in the application.
- 4a) Of the above claim(s) 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-10 and 12-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicants' election without traverse of group I, Claims 1-6, 8-10 and 12-23, filed on 7/14/05, is acknowledged.

The Restriction mailed on 6/10/05 has been carefully reviewed and is held to be proper. Moreover Applicants did not distinctly and specifically point out any error in the Restriction Requirement. Accordingly, Claims 24-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group, there being no allowable generic or linking claim.

The Restriction filed on 6/10/05 is hereby **made Final**.

Applicants are required to cancel these nonelected claims (24-26) or take other appropriate action.

An Office Action on the merits of Claims 1-6, 8-10 and 12-23 now follows.

### ***Specification***

2. The disclosure is objected to because of the following informalities:
  - On page 1, before "Field of the Invention", insert:

"Cross Reference to Related Documents:

The present application is a Continuation of Application No. 09/395,860, filed on 9/14/9, now US Patent No. 6,640,420.";

- The following title is suggested: "A Process for Manufacturing a Composite Polymeric Circuit Protection Device".

***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-6, 8-10 and 12-23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-43 of U.S. Patent No. 6,640,420. Although all the conflicting claims are not identical, they are not patentably distinct from each other because it is merely an obvious variation of the wording of an invention claimed

in claims 1-43 of U.S. Patent No. 6,640,420.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-6, 8-10 and 12-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Barrett (6,172,591 B1).

As applied to claim 1, Barrett teaches a method for making multilayer conductive polymer device, comprising:

- (1) providing a polymeric assembly comprising:
  - (a) providing first and second laminates (Fig. 14, 116 & 122), each of which comprises a laminar polymer element having at least one conductive surface (Fig. 14, 118a & 118c),
  - (b) providing a pattern of conductive material (Fig. 15, 126a) on at least one of the conductive surfaces on one laminate;

- (c) securing the laminates in a stack in a desired configuration, at least one conductive surface (Fig. 15A, 118d) of at least one of the laminates comprising an external conductive surface of the stack, and
- (d) making a plurality of electrical connections (Fig. 17, 156a & 156b) between a conductive surface of the first laminate and a conductive surface of the second laminate; and
- (2) subdividing the stack into individual devices through score lines (Fig. 6, 31a & 31b; col. 8, lines 36-56) each of which comprises at least one electrical connection.

**As applied to claim 2,** Barrett teaches the pattern is formed by selectively removing a portion of conductive material (Fig. 15, 128) from at least one of the conductive surfaces on one laminate.

**As applied to claim 3,** Barrett teaches a pattern of conductive material (Fig. 16, 126d) on at least one of the external conductive surfaces.

**As applied to claim 4,** Barrett teaches that the pattern on the external conductive surface is formed by selectively removing a portion of conductive material (Fig. 16, 128) from the external conductive surface.

**As applied to claim 5,** Barrett teaches that at least one of the patterned external conductive surfaces (Fig. 9, 32d) is at least partially covered with an insulating layer (Fig. 9, 38).

**As applied to claim 6,** Barrett teaches that an additional conductive layer (Fig. 11, 44) is added to at least part of at least one of the external conductive surfaces.

**As applied to claim 8,** Barrett teaches that at least one laminate is marked to provide a unique identification of orientation such as registration holes (Fig. 2, 24).

**As applied to claim 9,** Barrett teaches that the assembly comprises a third laminate (Fig. 14, 124).

**As applied to claim 10,** Barrett teaches that the selective removal of conductive material is accomplished by etching (Col. 7, lines 60-64).

**As applied to claim 12,** Barrett teaches that the electrical connection is made between conductive surfaces of the first and second laminates in the stack by (i) forming an aperture (Fig. 7, 36) which extends through the stack, and (ii) forming a conductive member (Fig. 10, 42) within the aperture.

**As applied to claim 13,** Barrett teaches that the electrical connections are positioned so that the individual device comprises at least two electrical connections (Fig. 8, 40) once the score lines (Fig. 6, 31a & 31b) are cut.

**As applied to claim 14,** Barrett teaches that the laminar polymer element in at least one of the laminates comprises a PTC (Fig. 1, 14) conductive polymer composition.

**As applied to claim 15,** Barrett teaches that the laminar polymer element in each laminate comprises the same PTC (Fig. 1, 14, 18 & 19) conductive polymer composition.

**As applied to claim 16,** Barrett teaches that the laminar polymer element in each laminate comprises different or wide variety PTC conductive polymer composition (Col. 12, lines 23-26).

**As applied to claim 17**, Barrett teaches that the assembly comprises three laminates (Fig. 1, 14, 18 & 19), each of which comprises a PTC conductive polymer composition.

**As applied to claim 18**, Barrett teaches that the laminar polymeric elements comprises a wide variety PTC conductive polymer composition (Col. 12, lines 23-26) such as a ZTC conductive polymeric material or an NTC conductive polymeric material.

**As applied to claim 19**, Barrett teaches that at least one of the laminar polymeric elements comprises an insulating polymeric material (Fig. 9, 38).

**As applied to claim 20**, Barrett teaches that the patterns on the internal and external conductive surfaces (Fig. 16, 126c & 126d) are different.

**As applied to claim 21**, Barrett teaches that the individual devices are subdivided from the assembly using well known techniques (Col. 9, lines 41-45) such as a saw, a grinding disk or the like.

**As applied to claim 22**, Barrett teaches that the laminate markings (Fig. 2, 24 & Fig. 6, 31a & 31b) which provide a unique identification of orientation also provide delineation for subdividing into individual devices.

**As applied to claim 23**, Barrett teaches that the conductive surface on each laminate comprises a metal foil (Col. 3, line 44).



*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M - F, 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tim Phan  
Examiner  
Art Unit 3729

tp  
August 22, 2005

  
**CARL J. ARBES**  
**PRIMARY EXAMINER**